



COMMUNICATING *Together*

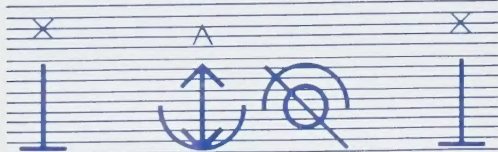
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COMMUNICATING together



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by Peter Wootton.

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Communicating Together is published quarterly as a means of sharing the experiences, systems and techniques of non-speaking people with their families, communities and the professionals who work with them. Special attention is given to the non-reader's augmentative communication system and the role of Blissymbolics.

The Blissymbolics Communication Institute was established in 1975 to facilitate the use of Blissymbolics as a communication system for non-speaking persons around the world.

BCI Affiliates and Information Centres are situated in —

Canada: Alberta, British Columbia, Manitoba, Newfoundland and Labrador, Nova Scotia, Ontario, Quebec

United States: Alabama, Florida, Michigan, New York, Ohio, Pennsylvania, South Dakota

Other than North America: Argentina, Australia, Belgium, Bermuda, Brazil, Denmark, Finland, France, Iceland, India, Israel, Italy, New Zealand, Norway, Portugal, Sweden, Switzerland, Spain, The Netherlands, United Kingdom, Venezuela, West Germany, Zimbabwe

Through BCI and its Affiliates, over 8,000 instructors have been trained worldwide.

Blissymbolics is a system providing comprehensive communication for the non-speaking non-reading person. It can be used with a variety of picture systems and technologies, and with traditional orthography — offering a basic structure for the non-reader's augmentative communication system.

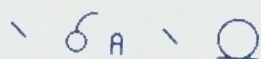
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September, 1982, C.K. Bliss granted an exclusive, non-cancellable and perpetual, world-wide license to the Blissymbolics Communication Institute, for the application of Blissymbols, for use by handicapped persons and persons having communication, language and learning difficulties.

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BCI is a member of the Canadian Rehabilitation Council For The Disabled (CRCD)

An Apple a Day



by Peter Sanderson

Peter Sanderson taught physical education for several years at Fenelon Falls Secondary School. Currently head of the school's Special Education Department, Mr. Sanderson took BCI elementary workshop training in 1982 in preparation for his "Apple a day" experience.

"An Apple a day..." or so the saying goes, has taken on a completely different flavour at Fenelon Falls Secondary School since the start of the 1982-83 school year. The taste is both unique and magical, and definitely just what the doctor ordered. Benny Belair, communicator extraordinaire, comic, ladies' man, artist, student and educator has taken this school of 750 students by storm. His arrival in September, 1982, has triggered a chain of events which has been of enormous benefit to us all. Benny himself claims it's been the most significant year in his young life.

Benny Belair has cerebral palsy. He is 16 years old and is already a very sophisticated Blissymbol communicator-educator. Few of his peers have experienced any difficulty accommodating to his system of communication. Benny was placed at Fenelon Falls Secondary School because his age, personality and increased educational awareness predicated a move to a setting that could enhance both his social and educational development.

The shift has been an overwhelming success. Benny has maintained an 81 percent average in six regular basic level courses; he has developed a love for reading and is currently completing his fourth novel study (readability level, grade 4); and his progression in art (with a grade 13 art student as his tutor) has been nothing short of phenomenal, prompting regular art classes to employ what has come to be called the "Benny technique." The educational objectives established for Benny in September have been clearly satisfied, but more significantly, the social priorities set have been mas-

tered by Benny beyond our wildest expectations. Which brings me to "an Apple a day."

Following a spring '82 assessment of Benny by the Augmentative Communication Service of the Ontario Crippled Children's Centre it was strongly felt that "a microcomputer would be a valuable and powerful augmentative communication aid for Benny, providing him with a means to independently write his thoughts in Blissymbols and/or words." The report went on to suggest that Benny's performance on the computer would assist us in ascertaining his strengths and weaknesses, and that the flexibility of such a system would permit adaptations to accommodate his particular needs and abilities. In closing, it emphasized that a microcomputer system would furnish Benny with something he had never had—access to information essential for him to more fully realize his potential in communicating, as well as in other areas such as education, recreation and vocation.

Enter the Apple II

Late in September, 1982, the Victoria County Board of Education furnished Benny with an Apple II Plus computer, complete with disc drive, colour monitor, key guard and Silentype printer. Initial programming centered around using the "Blissapple" communication program to allow Benny to write letters and compositions and complete homework assignments. Because his educational program involved integration in six regular basic level classes, time spent on the computer was limited initially to one learning package called "Apple Logo." At the same time, two grade 11 computer science students, Greg Pendlebury and Trevor Hutchinson, undertook, with teacher Richard Evans, the task of creating advanced programs for the county's only Apple computer. Their work has been invaluable.

With the duplicate system at home and our resident programmers in place, the pace of learning has intensified. For the past six months



Benny and his Apple.

Benny has seldom allowed us time to rest for want of increased challenges. His adjustment to the secondary school setting and the daily routines of regular classes occurred much sooner than anticipated.

New Programs, New Independence

Social-emotional objectives soon gave way to more concrete educational goals as we began to provide Benny with greater and more independent learning challenges. We made him responsible for taking mental notes on the main ideas and key vocabulary in all his classes, and then asked him to generate hard (printed) copies of the same using the Blissapple program. To give him greater independence in reading his notes and studying for tests, Greg and Trevor developed a program called "Write and See," which allowed the teacher's aide or another student to enter Benny's daily classroom notes into the computer (the notes are stored by date or topic and can be recalled easily for study and review). Benny's notebook is now a computer disc and is easily shared between home and school.

Increased independence in "note-taking" prompted the desire to make Benny more independent when writing tests and/or examinations. To this end, a program called "Ben" was developed, which permitted him to write tests without assistance. A test vocabulary was entered and the test itself altered slightly to facilitate true-false, multiple choice, matching, comparing and/or completion-of-blank questions. A hard copy was then easily generated in proper question sequence for submission to the classroom teacher. If Benny had difficulty reading test questions, a tape recorder adapted by the school's shop was utilized, and the test was taped.

A third program, similar to "Write and See" was then developed with editing capabilities, so that Benny could provide essay answers to questions on tests or generate longer written assignments. Two assignments, one written about a war veteran for history, and the other about the Children's Aid Society for his

Man In Society course, were very well received and of high quality.

In addition, two software packages developed by the Milliken Publishing Co. in St. Louis Missouri, and available through Moyer Education in Toronto, were purchased and used extensively to develop Benny's skills in mathematics and reading. The Math Sequences program was employed from early April to develop basic computational skills, and it is hoped that by using the program at home this summer and throughout the 1983-84 school year, Benny will be ready for secondary



Benny jokes with his sister.

school mathematics in his third year in high school. Similarly, the Cloze Plus Reading Skills Program allowed us to enhance meaning completion, syntax study and vocabulary development. All programs have been and continue to be employed in a very effective and efficient home-school program.

For the upcoming school year, programming plans are being fostered that will allow Benny to assist in the computation of statistics for our interschool hockey program. A more sophisticated word processing system is on the horizon to permit him greater literary freedom and increased flexibility for course selection. Phil Blackford of BCI has indicated a desire to pilot in our school the Blissworm Program now being developed. The program is

expected to have unique communication benefits, not only for Benny, but for all students in need of improved reading and writing skills.

"I Have Arrived!"

"An Apple a day" has had a significant impact on Benny Belair and consequently on all of us at Fenelon Falls Secondary School. Given the obvious educational advantages, the microcomputer has allowed Benny to experience total independence for the very first time. He has become more mature and sophisticated (despite his awful jokes) in nearly every respect. His vocabulary has mushroomed, his sentence structure and English syntax have improved immeasurably and his appetite for new and challenging experiences has become insatiable.

As Benny's confidence with the microcomputer has increased, so, too, has his desire to be independent in the school and community. He now lunches with various groups of students in the cafeteria, goes for walks during lunch hour by himself, attends most sporting events and often can be found reading before or after school in the school's learning centre. His acceptance in the school has progressed from early year avoidance by others, to acceptance as a handicapped person, to inclusion in most experiences as one of the gang. In May, Benny was elected by his peers as representative of their year on the students' administrative council. He ran his own campaign, composed his own platform speech and handpicked an appropriate student to deliver it. As he constantly reminds us all, Benny has "arrived."

Our hats are off to everyone at OCCC's Augmentative Communication Service; Benny's Apple II Plus system has accomplished absolutely every objective they said it would. When recently asked what the microcomputer has meant to him, Benny smiled and said, "It has allowed *me* to become *me*." The "Apple a day" practice will continue at Fenelon Falls Secondary School. To what end, only Benny Belair now knows for sure. □

International News



ISAAC

by Shirley McNaughton

IT'S A GROUP!

We are happy to announce the birth of ISAAC, the International Society for Augmentative and Alternative Communication, on Thursday, May 19, 1983. Everyone involved is doing very well!

For the thirty-five professionals, consumers and supportive laypersons involved in Augmentative and Alternative Communication, May 19 and 20, 1983, will be long remembered and cherished. Those memorable days at the Kellogg Center, East Lansing, Michigan, brought together a group of people eager to contribute their time and energy and dedicated to a common purpose — the forming of an international organization in support of the field of Augmentative and Alternative Communication. The collective knowledge and experience within the group reinforced for everyone the conviction that the time had come for a formal "beginning."

The purpose of ISAAC is to advance the transdisciplinary field of augmentative and alternative communication techniques and aids. Members of the first executive committee are:

- Chairpersons:
Shirley McNaughton, Canada
Gunnar Fagerberg, Sweden
- Secretary-Treasurer:
Donald Sherman, U.S.A.
- Conventions:
Penny Parnes, Canada
Howard Shane, U.S.A.
- Publications:
Lyle Lloyd, U.S.A.
- International Issues
and Communications:
John Eulenberg, U.S.A.
Laurent Junier, Switzerland
- Advocacy:
Pat Cashdollar, U.S.A.

- Formalization:
Vincent Schumacher, U.S.A.
Bob Fawcus, U.K.

Chairpersons of ISAAC's Ad Hoc Committees:

- Education:
Carol Nugent, U.S.A.
- Developing Countries:
Anne Warrick, Canada

Throughout ISAAC's gestation, delivery and first two days of life, there was a strong feeling of joy and anticipation underlying all of the intensive, objective-oriented interactions. As ISAAC grows and matures, we wish for all those who share in its development, the same joy and achievement we experienced in the birthing.

Please Join!

Contributing Members \$100.

Active Members \$25.

For further information and membership applications write: Donald Sherman, Secretary-Treasurer ISAAC, c/o Artificial Language Laboratory, Computer Science Department, Michigan State University, East Lansing, MI 48824 U.S.A.

Update at Halton Hills

The international camaraderie that has always been an integral component of the field of Augmentative and Alternative Communication was demonstrated once again at the May, 1983 BCI North American Affiliate and presenter meeting. Professionals from across Canada met with American professionals from New York, Florida and Pennsylvania to discuss training and system matters, and to share teaching experiences, audiovisuals and ideas for new materials.

Those who attended heard about the many developments in the field, among them: the introduction of Blissymbols to the Pacific region through the August, 1982 Taiwan Workshop; plans for an eye-coding book; an augmentative communication course in the Philippines in

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Ian Hargreaves, Victoria, B.C., Eugene McDonald, Philadelphia, P.A., and Lorne Mitchell of BCI, Toronto, Ontario at Halton Hills.

August of this year; an augmentative communication camp; labelling cards; the translation of children's books into Blissymbols; the WRITE System; work on the Blissymbol Self-Study Kit; raised symbols for the visually impaired; a Blissymbol colouring book; use of the Oaklands Picture Dictionary; Blissymbols and computers; organizations in the field of Augmentative Communication and much more.

The discussion established several priority undertakings by the following Senior Presentors:

1. Dr. Eugene T. McDonald offered to chair a committee to develop a lecture kit (plus support audiovisual materials) for use by those teaching at university and college levels. The project was given highest priority, to ensure that current and reliable information would be available to those being trained for professions relating to non-speaking people. Working with Dr. McDonald are Susan Sansone, New York, N.Y.; Jane Green, St. John's, Newfoundland; and Anne Warrick, Ottawa, Ontario. Target date for completion of the lecture kit is November, 1983. The kit will be available through BCI and its licensed distributors.

2. Anne Warrick, Ottawa, Ontario, and Claudia Woods, Montreal, Quebec, undertook to initiate a presenter association. Goals of the association would be to form regular communication links between presentors, establish fee schedules, share audiovisuals and new presentations and provide a forum for information exchange and upgrading.

3. Nora Rothschild, Toronto, Ontario, agreed to co-ordinate final work on the Blissymbol core vocabulary. Guidelines were decided upon, and with help from Halton Hills participants the make-up of the core vocabulary will be finalized by Oct. 1, 1983.

As always, each participant both brought and gained a great deal; as always, the international gathering stimulated and strengthened everyone involved. In the months to come, those who use augmentative communication systems across North America will be the beneficiaries of the renewed energy and determination generated at Halton Hills. □

Family and Community



Niagara is for Everyone

with Andrew and Mark



Andrew Murphy of Toronto has been communicating with Blissymbols for several years. In this column, appearing in each issue, Andrew and his father Mark share their experiences and those of other families with the special perspective of people who communicate in a special way.

Andrew described in Blissymbols the following story of his recent trip to Niagara Falls. His mother and I then translated Andrew's symbols into written English.

My classmates, teachers, helpers and I went to Niagara Falls for two days. We went to the Skylon Restaurant for dinner. I was not able to eat because I was tense, though the waitress was very kind to us. She talked to my classmate, Marsha. She was very interested in us. The waitress had worked with disabled children before. My teacher, Barbara, gave her a \$10. tip.

When we finished eating, we drove to see the Falls at night. Then we went to the motel and my teacher gave me a milkshake. We played Poker. I wanted many drinks. I went to bed late; some children went to sleep early. Our driver, Jim,

was my room-mate. Jim snored very loudly and he said I snored. We ate breakfast at the Love Boat Restaurant. I had pancakes and cold milk. The next day we went to a little town, Niagara-on-the-Lake. It was very pretty. We walked around, and I bought some fudge for home. We bought pizza in Niagara and ate it in the van. Then we went home. It was terrific!

We're Getting Letters... About another terrific child

James (Jimbo) A. Simmons is a 12-year-old student at Forrest Park School in Orange County, Orlando, Florida. Jimbo was born with Cerebral Palsy and is also deaf, making the communication process even more complicated. Although Jimbo was toilet trained at 3, could feed himself at 4, and could get around in a ring-seat walker, he needed a means of communication.

In January 1978, while the family was living in Georgia, Jimbo's mother attended a Blissymbolics workshop where she met Mrs. Sandra Osborn of Forrest Park School. As a result of their meeting, Jimbo's family learned about the outstanding Orange County Public School facility for physically impaired children available at Orlando. They moved there not long afterward, so that Jimbo could receive his Blissymbol training, occupational therapy, physical therapy and speech and classroom instruction while living at home within a strong family structure.

Jimbo started at Forrest Park School in the fall of 1978 when he was 8 years old. At that time, everything in his home was labelled with Blissymbols — food charts, clothing, furniture and toys. In addition, his sisters had a very large sturdy doll house that the family completely furnished down to the last detail, including a family of dolls — all labelled with Blissymbols. This constant reinforcement enhanced Jimbo's speed of learning his new communication system.

Jimbo learned the Blissymbol system rapidly and by Christmas he had 87 symbols on his board and

enough basics that his family could reason with him and change routines without frustrating him. For example, Jimbo was used to a certain daily schedule — school, home, playtime, dinner, some TV, a bath, hair washed and bed. If his mom had a meeting or wanted to change his schedule in any way, especially giving him his bath before dinner, it was a frustrating experience for everyone. Unfortunately, over the Christmas holidays Jimbo took a fall from his tricycle and had stitches in his head. But it all turned out very well. Using his Blissboard, Jimbo's family explained to him, "No shower, no washing hair for five days — sick head," and Jimbo completely understood. That was the very first time his family knew he could understand the reasoning behind their words — an outstanding breakthrough for true two-way communication!

In the spring of '79, Jimbo began walking alone and when school started, he was an independent walker. After more than a year at Forrest Park, Jimbo had a symbol board with over 300 symbols. He now types his math, sentences and word fill-ins, and is able to make multiple choice answers with his pencil. He also uses a combination of Blissymbol board, word board and sign language. Jimbo has been receiving instruction in manual signing for a year and a half; his mother and big brother have been attending signing class the past year, and other family members are learning from them.

At this point in his life, Jimbo's family considers him quite an exception in every respect. He now enjoys bike riding (with training wheels), driving the golf cart while his big brother golfs — and golfing himself. He thinks game rooms and Pac-Man should be a daily event. In the spring of last year, Jimbo won two gold medals and a bronze while running in the Florida State Cerebral Palsy Games. Jimbo is a delightful, happy, loving child with an excellent self image. Although he still has many "so-called" handicaps, in his mind he is number one, A-OK.

Don't forget to write and let us know what your experiences are. We all want to hear and to share.

Interested readers please write Andrew Murphy, 29 Kellythorne Drive, Don Mills, Ontario, Canada M3A 2L5.



Jimbo studies math with his therapist.

And a symbol letter from Sweden...

○→← ANDREW

hej Andrew
Hello Andrew,

⊥₁ [^]⊗ EDWARD PIPER.

jag, hetier Edward Piper
My name is Edward Piper

⊥₁ [^]⊕ 13 ⊗ . ⊥₁

jag, är är jag
I am 13 years old I

⊙ ⊡ > ⊥₂ ⊡ ∑

laste om dig i, Blissymbol
read about you in Blissymbol

⊡ × ⊙ . ⊥₁ [^]⊕ +!

tidning jag tyckerom
magazine I like

ROCK 2d .

musik
rock music

⊥₁ [^]⊕ } ⊥₂ [^]⊗ > ⊥₁

fräga vill du, skriva till mig
Will you write to me?

○←→ ⊥₁ EDDIE

hej från
Good-bye from Eddie.

This section of
Communicating Together
is sponsored by
Pilot Club International
Ontario District.

Write to: Eddie Piper
Marbäcksvägen 6, 52300
Ulricehamn, Sweden.

Toronto Kiwanis Club Gives Grant to BCI

Recently the Toronto Kiwanis Club announced the donation of a grant to the Blissymbolics Communication Institute, to develop a font which will assist in the publishing of Blissymbol materials. The font will allow the Blissymbolics Communication Institute to expand the number and type of publications it can undertake. Over the past two years the Kiwanis Club has been exceptionally supportive of the Institute through provision of consultative services and funding for the development of new material. We are most grateful for their help.



J. Reg Wilson, President, Toronto Kiwanis Charity Fund Inc., presents cheque to Shirley McNaughton, Executive Director of BCI. Photo courtesy Feature Press Photos.

Blissymbol Camp Newfoundland

The following description of the Newfoundland blissymbol camps was prepared from information written and compiled by Jane Green, a BCI Senior Presentor and former principal of Virginia Waters' School in St. John's. Mrs. Green was instrumental in initiating the first Newfoundland Blissymbol workshop and since its inception has been active in BANAL, the Blissymbol Association in Newfoundland and Labrador.

Three Blissymbol camps have now been held in Newfoundland, each of them unique in its own way, yet all focused on one main objective — to help communication between people, particularly those who communicate with Blissymbols.

The first two camps took place in 1981 — one for teens at Rotary Sunshine Park just outside St. John's, the other for young adults at the Max Simms Memorial Camp for the Handicapped, under the supervision of Administrator Dennis Brothers and Camp Director, Rhonda Raymond. The third camp, in 1982, involved young adults and older teen Blissymbol users, and was supervised by Camp Director Kathy Pilkington at Rotary Sunshine Park.

All three camps gave participants a relaxed and pleasurable time, and helped them with Blissymbols in at least three ways. One was by simply enabling campers to meet other Blissymbol users. Another was by involving family and friends in a variety of Blissymbol activities. Not only family and friends, but other community groups, like the local Girl Guides, became familiar with Blissymbols through visits to the camp. At both the Rotary Sunshine Park and the Max Simms Camp, Blissymbol labels for various rooms and objects left after camp (with permission of management) created considerable interest from subsequent campers and visitors.

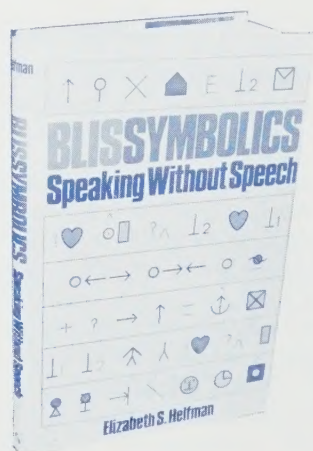
Jane Green speaks with enthusiasm about camp personnel and funding: "The staff were all volunteers. At Camp I, the dietitian from the children's home gave herself a busman's holiday by handling the catering and cooking; at Camp II, our terrific cook was "Mother"

BLISSYMBOLICS Speaking Without Speech

by Elizabeth S. Helfman

Elsevier-Dutton N.Y., N.Y., 1981

Written especially for adolescents and adults, this easy-to-read, informative publication presents the story of Blissymbolics — what it is, how it came to be and whom it has helped. The author describes Blissymbol users and their instructors in many environments, and demonstrates how "barriers to human communication, once thought impenetrable, have been shattered forever." (hard bound, 152 pages)



Available in Canada from:
Blissymbolics Communication
Institute
350 Rumsey Road
Toronto, Ontario M4G 1R8

\$15. Canadian

Available in U.S. from:
EBSCO
Box 1943
Birmingham, AL 35202

\$11.95 U.S.

Dwyer (as we called her), the mother of a symbol user; and, of course, everyone pitched in.

Nurses also gave their time, often on a 24-hour basis. At Camp III we asked for a volunteer from the graduate class of a school of nursing and were fortunate to have the opportunity to work with an excellent nurse, Dorothy Webber.

For our funding we relied principally on fund-raising efforts such as bake sales, ice cream franchises (one occasion at a folk festival), ticket sales and so on. We received support also from the Virginia Waters' School PTA, the Cerebral Palsy Association and the Department of Recreation and Youth (the Government of Newfoundland and Labrador). Campers were themselves responsible for a nominal fee, usually around \$20., plus their own transportation to and from the camp."

Mrs. Green goes on: "There were some difficulties to contend with. At Camp II, for example, we realized that several non-handicapped teen family members had problems equally as pressing and important as those of our handicapped campers. But with the help of our hard-working counsellors, among them Donna Gray and Anna McCormick, we went some way to filling their needs with daily scrambles up-river over rocks and boulders to a shallow swimming hole. Allowing the kids to ask questions and to give vent to

their angers and frustrations also helped a great deal."

Everyone contributed to the smooth running of the camps, which featured a mix of purely recreational activities, such as hikes, crafts like leather work and macrame, and Blissymbol exercises like scavenger hunts, bingo, dice and so on, played with Blissymbols. All menus and programs featured Blissymbols, while materials like blank grids, markers and flashcards kept on a table in the common room helped engender spontaneous use of Blissymbols in skits, chapel programs, notices and jokes. In all three camps, communication was deepened, not only among Blissymbol users, but often between them and their friends and relatives. Typical comments from family members include the 14-year-old sister of a Blissymbol user remarking, "I'm so proud of my sister," and the mother of a camper commenting, "We'll use her Blissboard more at home after this."

All in all, the camps were a decided success, and their aim — to help communication between people, particularly Blissymbol users — was certainly fulfilled. General proficiency in Blissymbols for all campers was greatly advanced, all in an atmosphere that prompted one camper to sum up the experience as "fellowship, friendship — and great fun!" □



Jane Green and Rhonda Raymond chat with Blissymbol users Mary Dwyer and Marina Blake.

Developmental Equipment's Portable Communication Board



Core Picture Vocabulary Cards not included.

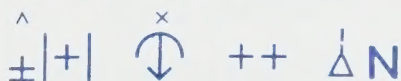
This lightweight Portable Communication Board opens to 21x15 inches and folds to only 7x15 inches allowing the user to easily carry it on his shoulder by the handle. Our Core Picture Vocabulary cards, Blissymbol Flashcards, PIC training cards and other card systems fit into the 3x3 inch individual plastic slots. It can hold 48 (24 on each side) cards or 192 stickers and stamps. The cards can be arranged and rearranged according to the user's needs and progress. If the user is going to a particular place or event, cards relating to that situation can easily be slipped into the plastic slots for communication about that particular situation. The Portable Communication Board is made from attractive fabric and is very durable.

Order the Portable Communication Board by sending a check or organizational purchase order that is payable net 30 days in the amount of \$26.50 plus \$2.50 for shipping. Canadian orders must be submitted in U.S. funds and add \$4.00 for shipping. If this product does not meet your expectations return it unused within 7 days for a full refund.

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developmental
equipment

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lake zurich, illinois 60047

Sharing Ideas With Nora



Nora Rothschild, consultant with the Augmentative Communication Service of the Ontario Crippled Children's Centre, heads up this regular column focusing on readers' questions, answers, problems and experiences.

Dear Nora,
I recently saw a movie called *The Acorn People*, where a person was using a small machine with a voice. My sister recently had a stroke and is now unable to speak. Could you please tell me if this machine could help her and where I could purchase one? Thanking you in advance for your help.

Sincerely,
Ann M., Toronto

Dear Ann,
The device you saw was very likely the HandiVoice, one of many voice output communication aids now on the market. For people who have the ability to read and have sufficient manual dexterity, the HandiVoice can be an extremely useful communication aid.

However, when prescribing any communication aid it is important that you consider the following factors:

1. Following a stroke it is possible that areas other than speech have

been affected, e.g., comprehension of another person's speech or writing, or the ability to formulate one's thoughts and find words for those thoughts. If you have not already done so, I would strongly recommend that your sister have a thorough speech therapy assessment. The therapist will then be able to determine whether your sister needs an augmentative communication system in addition to traditional speech therapy.

2. Should the speech therapist feel that an augmentative system of communication is appropriate at this time (either as a short-term aid to facilitate your sister's speech, or a long-term means of communication), she will then assess whether a graphic or gestural system would be more appropriate. Within these two broad categories there are a variety of systems to choose from.

It will then be important for the speech therapist and possibly the rehabilitation team, your sister and those close to her, to carefully analyze her needs, i.e., activities she would be willing and able to take part in, people she would like to interact with, accommodation, etc. These findings will help establish the requirements of your sister's communication system, should the system have voice output, be portable, include memory and so on.

3. For most non-speaking people it is essential that they have an easy, uncomplicated communication system for conversational purposes. In many cases, expensive high technology does not provide all the answers. These devices tend to be bulky and susceptible to breakdowns, and are often slow to operate. They may, however, provide useful functions such as message print-outs and voice output.

**This section of
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is sponsored by
the Tippet Foundation
Toronto, Ontario.**

All these devices differ considerably, and each one needs to be evaluated carefully, taking into account your sister's communication needs and capabilities. Simple non-technical aids can be just as useful, in many cases, than the more expensive communication aids. For example, a wood board can be made containing words that are important to your sister. If she can spell, you could also include an alphabet, or add some useful phrases. Whatever system is chosen, it is important that it meet your sister's needs. It may even be appropriate to combine a simple word, picture or alphabet display for conversational purposes and a technical device for specific uses, i.e., for writing and telephone use.

For further information concerning the HandiVoice, contact Phonic Mirror HandiVoice, Phonic Ear Ltd., 7475 Kimbel St., Unit 10, Mississauga, Ontario L5S 1E7, or telephone (416) 677-3231. In the U.S. contact Phonic Ear Inc., 250 Camino Alto, Mill Valley, California 94941, telephone (415) 383-4000.

Finally, you might also look at the magazine *Communication Outlook*, published by the Artificial Language Laboratory, Computer Science Dept., Michigan State University, East Lansing, Michigan 48824.

I hope this information has been helpful. Good luck.

P.S. I would like to remind readers that we welcome your participation. Please write with your queries, problems and experiences. We would like to hear from you. □

New Distributor in Australia

BCI is pleased to announce that all its publications and teaching materials are now available in Australia.

Our new distributor is:

**Ruth Walls Book Pty. Ltd.
15 Royston Street
Box 282
Paddington, N.S.W. 2021
Australia**

Teaching and Learning



Teaching the Blissymbol Alphabet

The Blissymbol Alphabet offers a means of arranging Blissymbols that is independent of the word assigned to the symbol. This capability makes for easier cataloguing and facilitates use internationally. The Alphabet also offers valuable learning opportunities. To users, the Alphabet provides a way of arranging the symbols on communication displays and in personal dictionaries. Thus, dictionary skills can be learned in this new medium, and when written language is eventually mastered, stu-

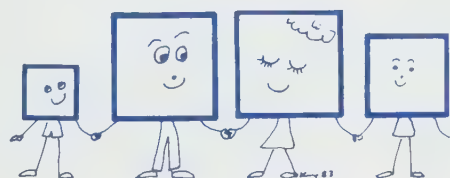
dents can gain an appreciation of the structure of their native language by comparing it to Blissymbolics.

Fun ways of teaching the Alphabet have been developed. One example is the Nancy Lageer stories (see p.12); another is the Blissymbol Alphabet Song adapted for Blissymbol users from the well-known ABC Alphabet Song (see back cover of Inaugural Issue, November, 1982).

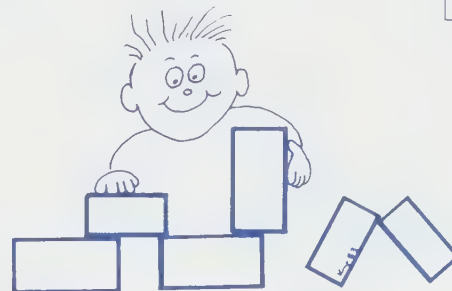
Introduced in our first three issues of *Communicating Together* were alphabet cards designed to complement the Blissymbol Alphabet Song

and help teach the Blissymbol Alphabet. This issue features the next four cards in the series. Readers interested in collecting the full set are welcome to write to BCI for back copies of *Communicating Together* while they last (see inside front cover for details). The alphabet card series will continue for the next two issues.

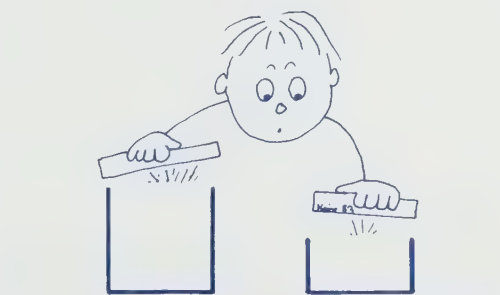
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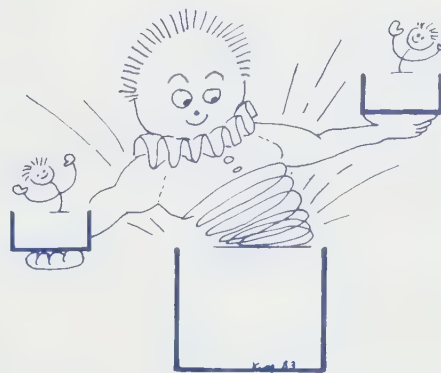
NOW MOVE TO ALL THE SQUARES



RECTANGLES COME ALONG



AS YOU OPEN UP EACH ONE



THEY STILL LOOK VERY STRONG

Blissymbol Alphabet Stories

In the last two issues we featured stories by Nancy Lageer designed to help children learn the Blissymbol Alphabet. Realizing her students enjoyed stories and pictures, Miss Lageer, a Blissymbol classroom teacher at the Ontario Crippled Children's Centre, created several stories with accompanying illustrations. As each story is told, Miss

Lageer associates the storyline with the Blissymbol shapes, giving the children auditory clues from listening to the story, and visual clues from the pictures.

This is the last in our series of three stories. We hope you and your symbol users have enjoyed them.

Readers are encouraged to adapt these stories and pictures to meet individual teaching situations. Write in with your comments and tell us about other ideas you have for teaching the Blissymbol Alphabet.

Charmaine and the Norfolk Kids

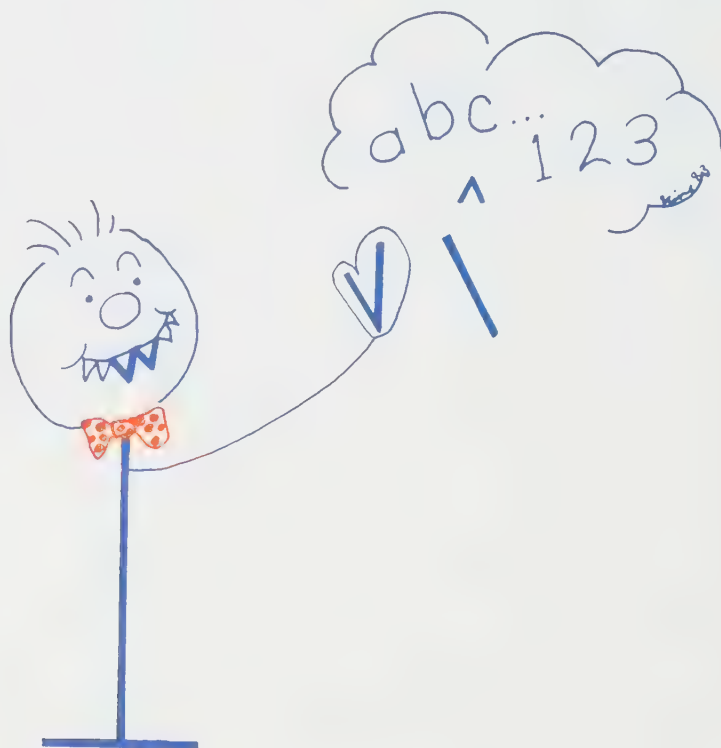
By Barbara Gulabsingh

Barbara Gulabsingh is a special education teacher at Simcoe Lions School, a school for the trainable mentally retarded in Norfolk County, Ontario. One of her pupils, 8-year-old Charmaine, had been progressing nicely with her Blissymbols but needed more Blissymbol stories than Mrs. Gulabsingh had time to provide. In December, 1982, a special project to find Charmaine the reading materials she needed was launched. The result has been more than a pleasant surprise for everyone, including a great many children in Norfolk County schools. When I saw how much Charmaine loved to read and realized I couldn't produce all the reading material she needed, I knew there had to be a solution. First, I thought of my daughter, who is in grade 7. I was sure she could put together some stories for Charmaine if I showed her how to go about it. From there I began to wonder if there were other children in Norfolk County who might like to help create stories for Charmaine.

What I finally did was place an ad in our local teachers' newsletter asking if any classes of children would like to "adopt" Charmaine. Since December, five classes have taken part.

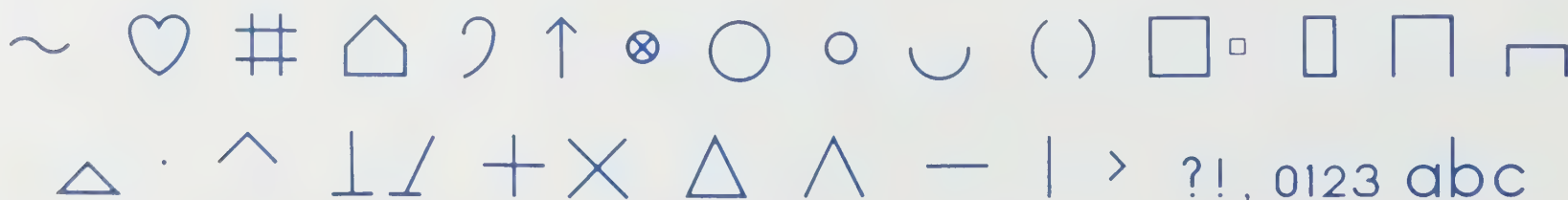
I'll explain how the project works. When a class volunteers to include Charmaine in its classroom activities, I make two visits to the class. On the first visit I give the students a very brief history of Blissymbolics, show them that Blissymbols are easy and fun to learn, give them instruction on how to draw the symbols and introduce them to Charmaine by way of a poster-sized snapshot.

The instruction part takes most of an afternoon. We start by having the students guess at the meaning of



Writing in the Sky

- | | |
|----------------------|----------------------------------|
| person | to write |
| with many many teeth | with a pointer |
| raised his hand | his ABC's and one, two, three's. |
| to the sky | |



several symbols, then we draw some of the simpler ones. I have found that by using ordinary ruled paper, and drawing small symbols one space high and large symbols two spaces high, the quality of the symbols is reasonably good. The children are encouraged to try several symbols, which are then checked for accuracy both by myself and the classroom teacher. It is a good idea to stress that the symbols must be placed in the correct plane, and must have verb or modifier symbols included.

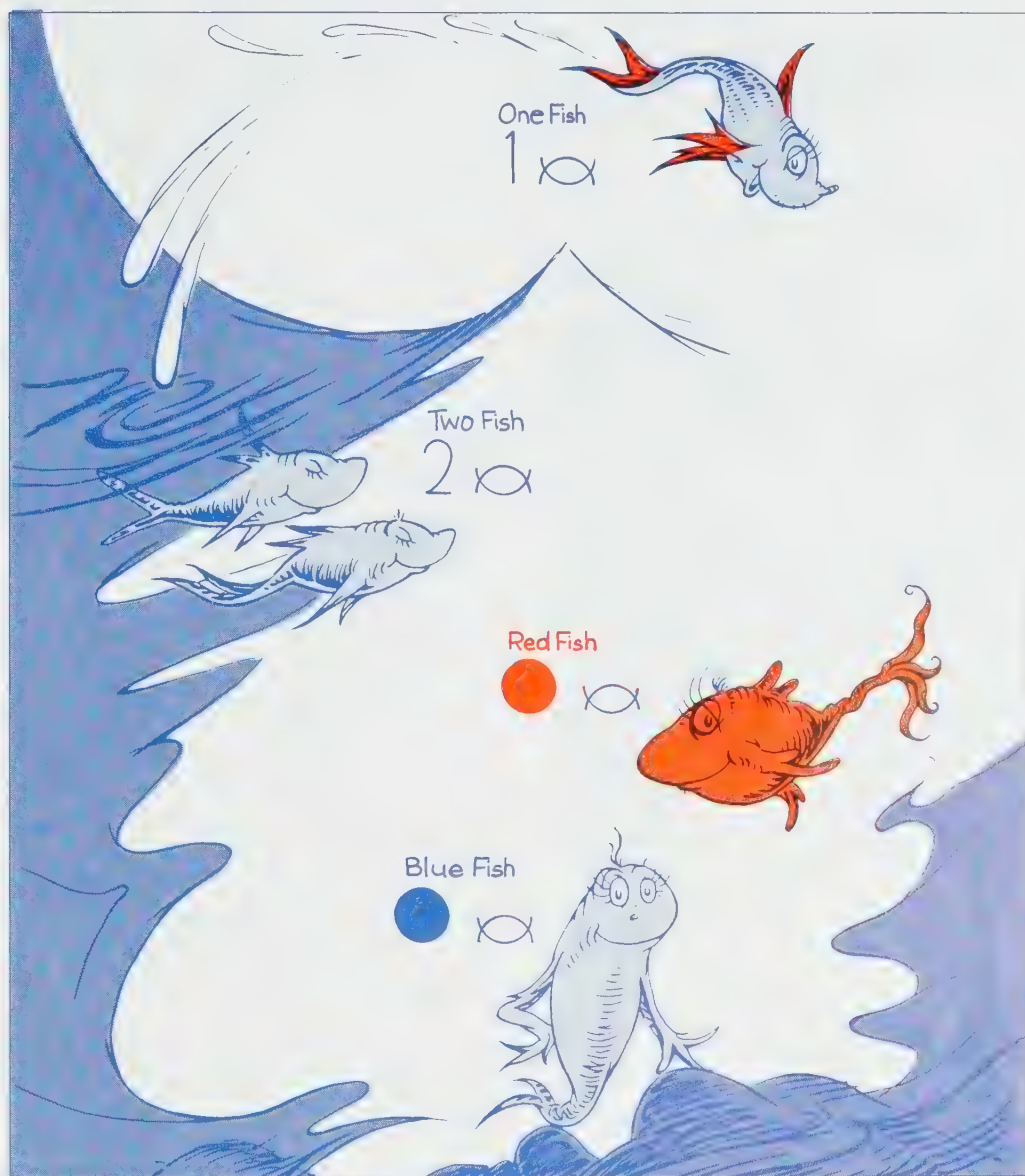
At this point I give each student a copy of Charmaine's vocabulary (it is helpful to have Blissymbols beside each word). With this vocabulary, we begin to make three-to-five-word sentences. Finally, I introduce several pictures and the students write stories in Blissymbols using only Charmaine's vocabulary.

It is necessary to stress neatness as well as the proper spacing of the symbols (I relate it to grade 1 printing where the youngsters are told to put a finger between each word). I also suggest that the symbols be re-copied with a thin magic marker to make them stand out more, and I encourage the students to use their imaginations to come up with games, stories or books suitable for Charmaine.

I leave the class with several items: the book *Blissymbols for Use*; the picture of Charmaine; some Blissymbol flash cards; Charmaine's vocabulary; a short reading about Blissymbolics from *Reader's Digest* (December, 1978); and a kit called *Kids Come in Special Flavours**, which allows the students to experience some of the handicaps of our "special" students. I suggest also that the films *Symbol Boy* and *Mr. Symbol Man* be obtained through the National Film Board.

At the end of a month, Charmaine and I visit the class — a highlight for the regular students. Each class has made both Charmaine and myself feel very special. The students have all agreed that it has been an enjoyable, worthwhile experience and would recommend that other students try it.

The teachers generally have felt that though Charmaine may have benefited by getting new reading material, their students have learned



One fish two fish red fish blue fish by DR. Seuss'

so much more. The students have developed insights into the life of a handicapped person, learned to be very accurate and neat in their work and their work has come to have more meaning. The students have also had the opportunity to use their imaginations to create new kinds of stories, short books and games. The fact that only one handicapped student has been involved has also made the experience very non-threatening for them. As a result of meeting and interacting with Charmaine, there's no question that none of the students will ever react to a handicapped person or a wheelchair the same way again.

If there are any readers who might like to pursue a program like this one, I'd like to suggest some practical hints to keep in mind:

- Keep pictures and stories small enough to fit into a photo album.
- Spend as much time as possible

teaching the drawing of the symbols, stressing accuracy.

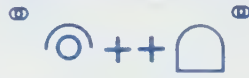
- Use grades 5 or 6. These children are fairly neat and can understand the need for accuracy.
- Use old readers, picture books or colouring books rather than magazine pictures, which are usually too busy (old readers are super because each picture focuses on only one idea).

It's all been an enormous success. Charmaine has lots of the stories she loves to read, as well as many new friends; and Blissymbols and a Blissymbol user have come to mean something very special to a group of children in Norfolk county. □

'Illustration reproduced by permission of the publisher from One fish two fish red fish blue fish by DR. Seuss, © 1960 DR. Seuss by Beginner Books, a division of Random House Inc., New York.

**Available from: Kids Come in Special Flavours Company, Box 562, Forest Park Station, Dayton, Ohio 45405, U.S.A.*

Perspective



An Interview with Caroline Musselwhite



Caroline Ramsey Musselwhite has a doctorate in speech-language pathology with a minor in special education. She currently provides direct services to severely disabled children at the Irene Worthan Center in Asheville, North Carolina. She also provides consultative services and lectures in the United States and Canada. Dr. Musselwhite has co-authored two textbooks, the most recent entitled, Communication Programming for the Severely Handicapped with Karen St. Louis. She is now working with Faith Carlson on a non-speech communication activity book for children.

Around 1976 when I was a supervisor of graduate students at West Virginia University there were some severely handicapped people in our clinic and I started getting involved again with Augmentative Communication (I had had a little experience as a college student at a centre for the mentally handicapped in North Carolina). I then became more and more interested as I began working in classrooms for the severely handicapped in several public schools and started into my doctoral program. However, as I searched for information on the field, I began to get more and more frustrated. A lot of things had been

written but many were not in print or otherwise not available — you know, someone knew of someone who had a mimeographed copy somewhere, and so forth.

At that time, Karen St. Louis was working on a communication curriculum for the severely handicapped and we began sharing resources. We decided to develop an annotated bibliography of all the material we had collected so that the material could be shared more easily. Well, it started growing and eventually it was published as a working paper. Then we put a little notice in *Communication Outlook* and got an incredible response. A number of people from many different countries wanted the information.

At the time I was also writing a paper on communication for the severely handicapped, a kind of state of the art summary. By the time I finished it, it was much too unwieldy for a journal, and one of the professors at West Virginia University said, "There are a lot of us who know nothing about this area, and could really use the information. Why don't you put it together into a book?" I thought, that sounds good — a nice short 75 page overview with references so that people could get more information; just a nice textbook for beginning clinicians and people out in the field. So Karen and I put what we had collected together and sent it out to some publishers, who suggested it should be expanded. Of course that's easy to say, and we said, sure, no problem, of course we'll expand it. Well, 300 pages later...

In June 1980, we sent the manuscript off. Unfortunately the mailing company lost it for several months, so there was an incredible gap between sending it off and seeing it in print, finally, in 1982.

About the response to the book, I really had not been too aware of it until I went to the conference in Toronto last fall. As you know, I'm living up in the mountains with my loom and my spinning wheel, work-

ing at my job and only communicating with a few people, so I don't have a lot of opportunity for that kind of contact. I've been very pleased with the response. I'm hearing, for example, that our book is being used as the primary text in some courses, and as a supplementary text in others.

I should add, too, that we are hopeful it will not only fill a need in speech pathology, but in other areas as well. We've in fact made a point of going very heavily into the special education literature because speech pathologists have not traditionally concentrated on the broader picture. When I was a doctoral student at West Virginia University I got very involved in special education literature and could see that many people were doing a lot of things that we as speech pathologists were not doing — a lot of exciting things, especially for the severely mentally handicapped, whom I think had been somewhat neglected by our organizations for many years.

Yes, I could comment on what I see as some needs of non-speech communication in the next decade. Working on the book has in fact begun to interest me in a variety of research topics. For example, there has been a lot of concern that we're getting too involved in systems and not giving enough consideration to factors such as interaction strategies. I certainly share that concern, but at the same time I feel that a lot of people aren't familiar with the systems who should be; that many practitioners in the field are not yet aware of the variety of options available. If we tend to become very adept at only one system and then start trying to make everyone fit that system, we will be doing people a great disservice.

I do see a lot of positive things happening in the field, such as well-designed practical research, but I think we need to do other things as well. I'm concerned that we may get complacent and feel that if we start a journal for non-speech communication, for example, that that

will be the answer. But that's not going to do it, because a journal will go largely to people who are already pretty familiar with non-speech communication. What we really need is an explosion of information that can be made available to people who aren't quite so involved.

I see doing this in different ways. One way might be to set up a system of cross-referencing articles from several different publications. For example, *Communication Outlook* has recently offered to publish a summary of relevant articles to help fill this gap. As I said, a major frustration so many of us feel is the difficulty getting hold of much of the very excellent but unpublished materials available, so we could also certainly use a clearing house for unpublished documents.

I'm not sure what is going to happen to the field of speech pathology. We keep talking about working only in specific areas, but then we look at the populations we work with and the settings we work in, and I'm not sure it's feasible. If you know you want to work in a rehabilitation centre, you may be able to specialize, but I'm not convinced that we in the field can specialize even if we want to. Consider this: if you work in a small geographic area, one person can't serve just one part of the handicapped population; a person in that situation is going to have to serve a wide variety of people.

I would like to see some statistics. I have a gut feeling that more people are needing to be served in small centres or small school systems than in the major centres. I do understand that we cannot all be experts in everything, but I am concerned that ultimately it's the local speech language pathologist, occupational therapist, physical therapist or special educator who is going to have to implement these programs.

In summary, most of my concerns for the next decade focus on issues related to communication — between professionals, families and non-speaking people, and between the major centres and the "grass roots" areas. But if we continue to make strides as we have in the last decade, the future of non-speech communication looks incredibly bright. □

Machines, Computers and Things



Choosing a Microcomputer for the Communicatively Disabled

by Kathy Lee

Kathy Lee is an occupational therapist involved with the Microcomputer Applications Program (MAP) currently underway jointly by the Rehabilitation Engineering Department (RED) and the Augmentative Communication Service (ACS) of the Ontario Crippled Children's Centre. Financed by a grant from the Max Bell Foundation, MAP takes an interdisciplinary approach in both research and the service program. The overall goal of MAP is to develop an effective service model for the use of both personal microcomputers and computers in general, as tools for use by physically handicapped persons. The program has been designed to work in a dual mode, by combining research with service, wherein service is reinforced by research.

Microprocessor technology has opened doors to many exciting new communication possibilities, becoming the heart of various systems used for communication, i.e., dedicated communication aids, personal microcomputers and (specially designed) microprocessor systems for the individual. In this issue, the focus will be on the personal microcomputer.

There are many ways one can use a personal microcomputer to communicate. A message created in traditional orthography and/or Blissymbols can be displayed on the video screen, printed on a printer or spoken through a voice synthesizer. With telecommunications technology it is possible to communicate via telephone lines with another computer which is far away, in order to access information. The main disadvantage of many microcomputers for communication is that they are not portable and thus

limit these augmentative communication capabilities to a workstation type of activity. The Trace Center International Software/Hardware Registry contains many programs and modifications created or adapted for use for handicapped individuals. When a personal microcomputer is recommended primarily for communication, it is important to keep in mind the many other ways that the microcomputer can enhance a disabled person's life experiences.

The New Terminology

To understand fully how a microcomputer can help a handicapped person, one must first learn about the components and terminology associated with the microcomputer. It is not appropriate here, or necessary, to detail the intricacies and functions of a computer system. Other agencies have addressed these topics very effectively, as for example, TVOntario and their excellent 12-week series, "The Academy on Computers in Education." However, it may be helpful at this point to present a simple diagram of the main computer components, and introduce some frequently used terms and their definitions.

Memory:

Indicates the amount of information which can be stored temporarily or permanently. The available memory in a system will determine what software (or programs) can be used on that system. Each program should specify how much memory is required to run the program.

Hardcopy:

A printed paper copy of work from the computer.

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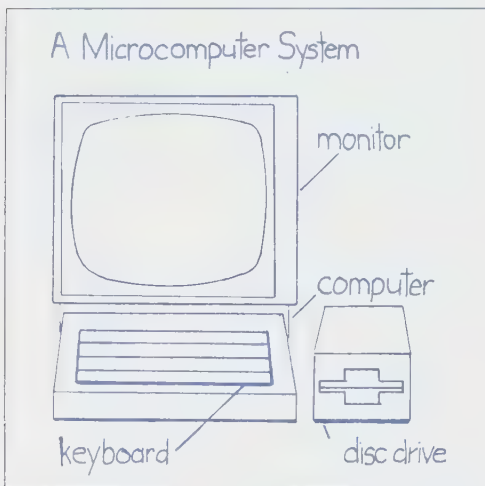
Interface:

A device by which an individual can control a computer (e.g., keyboards, and single or multiple switches).

Access:

The method by which one can control the computer (usually includes the physical device, such as the keyboard or switch, and the required strategy).

Gregg Vanderheiden, Director of the Trace Research and Development Center for the Severely Communicatively Handicapped, University of Wisconsin, Madison, gives a good description of the many ways a microcomputer can be used by handicapped individuals (*Byte*, September, 1982). There are many software programs specially designed



for handicapped persons, which can be used with alternative control modes other than the keyboard. Vanderheiden also discusses the importance of providing handicapped persons with access to commercially available software packages used by the able-bodied.

However, a major problem exists for severely physically handicapped individuals who use a computer to run a commercial software program (i.e., word processing), as well as to assist them in managing other activities (i.e., contacting other information sources necessary to complete a task). As solutions to this problem, transparent modifications, multitasking and multilevel program processing are important concepts (to be discussed in a future issue).

Factors for Consideration

Although the microcomputer holds great potential for handicapped individuals, there are many factors to be considered before a system is

recommended for a particular individual. For example, the decision concerning the most appropriate system for an individual should not be determined by the price of the equipment, but should be determined by first assessing and prioritizing the client's needs. Why does the individual need a computer? Is it only for communication and/or education, or will it also be used for word processing, specific data entry or creative arts?

At the first stage of investigation, it is important to identify persons in the client's home environment who can act as "facilitators." Facilitators can then be responsible for such activities as reinforcing the proper control movements the client needs to access the computer and assisting the client with software programs (the amount of involvement of the facilitators depending on the level of independence of the client).

The second step in the decision-making process is a search for appropriate software programs to meet the client's needs. It may be useful to obtain information from individuals or agencies using similar computer applications, or actually view specific programs. Don't forget, too, that the average dealer is often ignorant of special applications for the handicapped, although with the increased demand in the field some dealers are becoming better informed. The creators of the Apple publish *A Resource Guide on Computers for the Handicapped*, which gives a listing of people working in the field, as well as short descriptions of a number of special software programs.

When allocating funds for computer hardware, remember that funds must also be allocated for purchase of software programs. (It is, in fact, conceivable that the required software may cost as much or more than the hardware.) Some have naively suggested that a parent or friend who is able to program one computer could put together an appropriate program for the handicapped member of the family. But good quality software programs take many, many hours and many, many dollars to produce. Development of a program also requires the interplay of teachers, programmers and others who have expertise in areas

such as control systems.

The third step is an assessment of the individual to determine if a regular keyboard is the most efficient access mode, or if modifications or special single or multiple input controls (i.e., single switch or joystick) are necessary. It may be difficult at the present time to get such an assessment, because there are few health care professionals who are knowledgeable about computers and the various control systems available to the handicapped person. Hopefully, with more ongoing education of the appropriate personnel, such assessments will be soon available.

The fourth step involves choosing the hardware to satisfy these three factors: client's needs; specific software to meet those needs; and access mode. In the near future it may not be necessary to consider the access mode when deciding on a main computer system. Vanderheiden suggests that any special input modes may be managed in a smaller computer, thus eliminating any interruption of the main program. It is anticipated that handicapped individuals will have small portable computers which could accept their particular access mode and interface or plug into any other computer.

Decisions regarding the purchase of a microcomputer for a centre should be based on the steps outlined above. The main difference is that it is necessary to determine the needs of the wide spectrum of clients who may be served by the computer system.

Finally, when making the purchase, shop around for the best prices; they are negotiable. Because microcomputers are produced for the mass market, especially in business applications where there is money to be made, microcomputer prices change rapidly and frequently. You can keep up with the times by subscribing to computer magazines and by maintaining contact with colleagues in the field. Local computer hobbyist groups or computer science classes in nearby colleges or universities may also be good sources of support and information.

The microcomputer has taken the field of rehabilitation by storm. It is an exciting, rapidly growing field that is definitely here to stay. →

INTERNATIONAL SOCIETY FOR
AUGMENTATIVE AND ALTERNATIVE COMMUNICATION

(I.S.A.A.C.)

ISAAC is an international organization whose purpose is "to advance the transdisciplinary field of augmentative and alternative communication techniques and aids." ISAAC was born on May 19, 1983 at Michigan State University with the assistance of 35 people representing seven countries and three continents. While it is envisioned that ISAAC will be governed by its membership, an Executive Committee has been elected to fulfill the administration of the organization.

Membership in ISAAC entitles you to all of the following:

- 1) a one-year subscription to Communication Outlook,
- 2) a registry of ISAAC members and others concerned about or working in the area of augmentative and alternative communication;
- 3) the opportunity to subscribe to Communicating Together at a 33% reduced subscription rate;
- 4) reduced conference fees for conferences organized by ISAAC;
- 5) ISAAC conference proceedings and other ISAAC publications.

You are important! Your involvement in ISAAC is important whether you are a communication aid user, relative or friend of a communication aid user, advocate or professional concerned about the development and use of augmentative and alternative communication techniques and aids. Here is your opportunity to be a part of the only international organization for the field of augmentative and alternative communication. Please take time to complete the membership form below and return it with your dues.

ISAAC Membership Application Form
(Please print or type)

Name of Applicant _____

Occupation _____

Address _____

Telephone (____) _____

Area Code: _____

Do you wish to have your name, address, and phone number listed in ISAAC's registry which will be made available to the general public?
yes _____ no _____

Do you currently subscribe to Communication Outlook? yes _____ no _____

Please note: ISAAC offers two types of annual membership:

- 1) Active Member \$25. U.S. (\$30. Can.).
 - 2) Contributing Member \$100. U.S. (\$125. Can.).
- (If you are currently a subscriber to Communication Outlook, membership dues will be \$12 less, \$15 less outside North America.)

I wish to become a(n) _____ Active Member _____ Contributing Member.

I have enclosed my check/money order in the amount of \$_____.

Please make all checks/money orders payable to I.S.A.A.C.

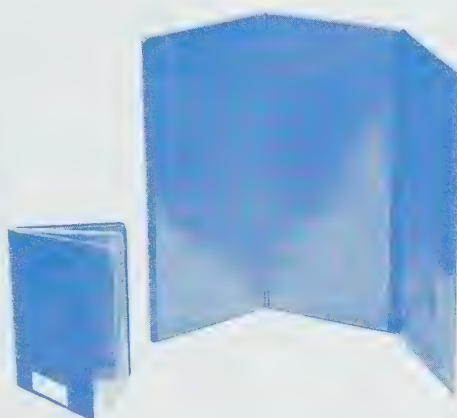
Send your application form with your check/money order to: Donald Sherman, Secretary/Treasurer, I.S.A.A.C., c/o Artificial Language Laboratory, Computer Science Department, Michigan State University, East Lansing, MI 48824.

References:

Apple Computer, Inc., *Personal Computers for the Physically Disabled: A Resource Guide*. Cupertino, CA., U.S.A. In Ontario, write Apple Canada, 875 Don Mills Rd., Toronto, Ontario M3C 1V9. Telephone: 444-2531.

TVOntario, TVO Academy on Computers in Education. Write TVO Academy on Computers in Education, Part-time Learning, TVOntario, Box 200, Station Q, Toronto, Ontario M4T 2T1. Telephone: 484-2648.

Vanderheiden, G., "Microcomputers Can Play a Dual Role for Disabled Individuals." In *Byte*, (Sept., 1981): pp. 166-185. □



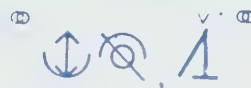
PORTABLE DISPLAY FOLDERS/ COMMUNICATION BOARDS (2 sizes available)

The most commonly used board, the 7½" (19 cm.) x 17½" (44 cm.) tri-folder, is capable of containing 350 symbols per side for a total capacity of 700 symbols. Price: \$7.

A smaller more compact display, the menu folder, is capable of holding 250 symbols in four separate sleeves. Good for beginning symbol users, this folder measures 6" x 9" and is easy to carry and store. Price: \$9.

Available, in Canada only, from:
Blissymbolics Communication Institute

Augmentative Communication



Amer-Ind Code with Madge Skelly- Hakanson

by Elizabeth S. Helfman



Madge Skelly was Professor of Community Medicine at St. Louis University School of Medicine (1965-83) and Professor of Communication Disorders for the university's graduate school. She was also Chief of the Audiology and Speech Pathology Service at Veterans Administration Medical Center (1965-77). After a brief retirement, she accepted the position of Chief of the Department of Mental Health for the State of Missouri. In March, 1983, she resigned her St. Louis appointments when she moved to Cleveland, Ohio, as the wife of Richard C. Hakanson, the noted forensic photographer. Dr. Skelly has recently been appointed a professor in the Department of Communication Sciences at Case-Western Reserve University, Cleveland.

Skelly's training includes audiology, speech pathology, special education and rehabilitation. She has conducted workshops in glossectomy rehabilitation and Amer-Ind Code in many parts of the United States and around the world.

Skelly's book for professionals in the field, Amer-Ind Gestural Code Based on Universal American Indian Hand

Talk (New York: Elsevier Science, 1979) is a clearly written explanation of the use of Amer-Ind Code with non-speaking people, including 250 clear, well-drawn illustrations of Amer-Ind Code signals. A second book written especially for the general public is now in progress.

"How would you like to interview Madge Skelly?" I was asked at the Non-Speech Conference in Toronto last fall. "She's using Amer-Ind Code with people who can't speak."

I was not yet acquainted with Madge Skelly's work and my knowledge of American Indian hand signals had been limited to use with third graders who liked to think they were Indians.

"Don't worry," I was told, "She'll tell you."

And so she did. From beginning to end I was fascinated by Madge Skelly, herself an Iroquois Indian, and her account of her work with Amer-Ind Code (a title copyrighted by Skelly herself), a communication system adapted from the original manual system of communication (Hand Talk) developed by the North American Indians and dating back to the early migrations of Indian tribes from Asia. Speaking widely different languages, the tribes created a beautifully simple and easily understood system of gestures as a means of communication. As Skelly notes, "Amer-Ind Code is as universal as the pictographs used internationally in airports and on highways."

Amer-Ind Code, like Blissymbolics, is not a language and does not depend on spoken words (Skelly, in fact, prefers to call it a code or signal system). Modified somewhat for the use of people who cannot speak,

**This section of
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the Sir Joseph Flavelle
Foundation, Toronto, Ontario.**

Amer-Ind Code has distinct advantages: it is highly related to reality and is primarily an expression of action; signals can also refer to persons or objects, and to their functions. It is in this emphasis on action that the signals differ from Blissymbols. Skelly has found, in fact, that some non-speaking people cannot process Blissymbols (probably because of a particular form of brain damage) and need to express themselves, not visually, but through movement.

Like Blissymbols, Amer-Ind Code signals often cannot be translated precisely into words. Interpretation is determined by the context and may vary. (One signal can suggest a number of words, averaging between 10 and 20 in European languages; thus, the 250 signals in the repertoire are equivalent to a 5,000 word vocabulary.) Meanings can also be further multiplied by combining signals (as in the combine strategy of Blissymbols). Some examples: *library* is *shelter* plus *read*; *girl* is *woman* plus *little*; *television* is *box* plus *look* plus *hear*; and so on.

Manipulation of the Amer-Ind Code signals is made easier by the fact that the system has no structure requiring complex rules or grammar. Of course, users must be able to control their hands. Most signals, however, can be adapted for use by one hand only.

Amer-Ind Code is sometimes compared to the manual communication systems used by the deaf. It is not the same. Deaf signers translate into gestures a language they share with their viewers, while Amer-Ind Code is not based on language at all. Furthermore, Amer-Ind Code is much easier for untrained viewers to understand because the action conveys the meaning (Skelly claims over 80 percent intelligibility for Amer-Ind Code with non-instructed viewers). This does not mean that the signals are equally easy to learn. Skill and patience are required when teaching them to patients who lack language (notably receptive aphasics and severely or profoundly impaired mentally retarded).

It is interesting to see how some Amer-Ind Code signals work. Social signaling is, of course, of first importance. A greeting such as *hello*, for

example, is expressed by the original American Indian signal for *peace* (the hand held up, palm forward, holding no weapon, meaning that the signaler comes in peace).



Hello'

A logical next step is the signal for *friend* (one's own hands are clasped together at the wrist. Among Indians, a palm-to-palm clasp was permitted only between friends who fully trusted each other).

Following such a greeting, the usual question is, "How are you?" In Amer-Ind Code, as in Blissymbols, the question signal precedes the question, for example: "question you walk." Or, a welcome to a friend becomes: "See you heart me dance." (To see you makes my heart happy.); and the reply: "Same me." These examples show us the importance of observing the *action* portrayed by the hands of the signaler, rather than trying to decide what *word* may be represented. The viewer should let the hands talk. Social signals especially, have a long and meaningful history. Knowing something of this history can also be helpful to present day signalers.

Teaching and helping others teach Amer-Ind Code to those who could not otherwise communicate is Madge Skelly-Hakanson's first interest. She first tried Amer-Ind Code with a patient in a veterans' hospital who had lost his tongue during an operation and, according to his fellow patients, wanted to write a book. Clearly here was a literate person who needed to express himself. At first, she thought she would try deaf signs, but he had said (in writing), how could he be understood? He did not know any

deaf people. Well, then, Skelly had said, what about Amer-Ind Code Hand Talk? He said he thought it would be fun, even if it meant he could only communicate with her. To his surprise and hers, he was understood by everyone.

Skelly then tried using Amer-Ind Code signals with aphasics who, in her own words, "took to it like ducks to water." And success has followed success, both with several brain-damaged people who needed to learn through movement, and several retarded for whom any other means of communication had seemed too complicated. Skelly also holds individual and group sessions with patients, using pictures and concrete objects (a mirror, for example, can help patients see their own signaling).

Learning happens slowly, with modest goals at the beginning. Little by little, minds that have been locked inside reach out to the world.

Though Skelly insists it is too early to make definite claims for the success of her work, many people in the field are convinced that she has already made a significant contribution to Augmentative Communication. We know that no one system is appropriate for all people who cannot speak, but any method that reaches those for whom no satisfactory means of communication has yet been found is definitely cause for rejoicing.

The American Indians have an old saying: "Action I believe, words can deceive." Action, Skelly reminded me at the end of our talk, often does say so much more than words, and especially for those who lack language. □

Elizabeth Helfman is a free lance writer, and author of 19 books, including Blissymbolics: Speaking Without Speech published in 1981. In 1967 she wrote Signs and Symbols Around the World, devoting eight pages to the work of Charles Bliss. It was through this book that the team at the Ontario Crippled Children's Centre first encountered Blissymbolics.

Illustration reproduced by permission of the publisher from *Amer-Ind Gestural Code Based on Universal American Indian Hand Talk* by Madge Skelly, pp.305,290; ©Copyright 1979 by Elsevier Science Publishing Co., Inc.

Blissymbol Talk



This section focuses on the Blissymbolics system itself. For those already familiar with Blissymbolics, new symbols and new ways of looking at the system are introduced. For those new to the system, an introduction to standard Blissymbols is given, including new ways to use the symbols. The quiz is for everyone.

For New Symbol Users

Two Important Verbs:

(to) have

half-sized symbol
for *to own*: to have
something in one's
possession without
necessarily owning
it

(to) be

half-sized symbol
for *to live* +
action indicator;
the little meaning
of *to live*

What Makes them Action Symbols (Verbs):

action

from shape of
volcano cone,
which C.K. Bliss
says represents
"one of the prim-
eval actions of our
earth"

action indicator

quarter-sized action
symbol, placed
above a symbol to
create the infinitive
form of a verb;
also used to indi-
cate the present
tense of a verb

Pronouns

Singular

I, me, myself

person + 1: the
first person singular

you, yourself

person + 2: the
second person
singular

he, him, himself she, her, herself

man/woman + 3:
the third person
singular

Plural

we, us, ourselves

person + 1 + plural
indicator: the
first person plural

you, yourselves

person + 2 + plural
indicator: the
second person plural

they, them, themselves

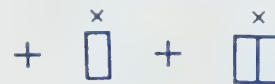
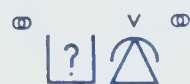
person + 3 + plural
indicator: the
third person plural

A Symbol Quiz

1. If you want to stress that "they" are all female, how would you draw the symbol?
2. What is the symbol for *to grow* in the sentence "Weeds grow quickly"?
3. Over what symbol component is the action indicator usually placed?

(Answers on p. 22)

Research and Publications



"Hooking Up" to the Computer

by Geb Verburg



Research and Publications is headed up by Geb Verburg, who has been involved in the field of non-speech communication since the mid-seventies. A cognitive scientist, Mr. Verburg is currently working as research officer in an OCCC project investigating the use of microcomputers with the disabled.

Microcomputers have been called "intellectual amplifiers" and "information prostheses" (Papert and Weir, 1978), but while both descriptions are appropriate, they far from cover all possible applications of this technology for the disabled. For this population, microcomputers and microprocessor technology can go a long way towards opening a world which was hitherto only accessible to able persons. Microtechnology is now being used in the home, the schools and the work place, where it aids household tasks, "cottage industry" jobs and long-distance communication. It will also play a major role in the mobility of non-ambulatory persons and the education of both able and disabled persons. And in the work place, with its greater emphasis on non-physical (i.e., data handling) activities, microtechnology is opening up competitive employ-

ment opportunities for the disabled.

All of these possibilities come to naught, however, if the disabled person is unable to control the computer. When a person is unable to use the keyboard, an alternative means of controlling the computer must be found. The art and science of providing a disabled person with control over a computer or other microtech device is called interfacing.

The Interface

An interface is a device that allows a person to control a computer (or a communication/mobility/aid). By this definition, a keyboard is an interface, but one that is often inappropriate because the person cannot reach, depress or target the keys sufficiently, or cannot do so in any way. Alternative control or input devices have been created in an astounding range of types and varieties and new interfaces continue to appear on the market. These can vary from enlarged and miniaturized keyboards to single or multiple switches operated by the finger, hand, arm, feet, leg, head, mouth, chin and even by the raising of an eyelid. Pneumatic switches can be activated by puffing or sucking air through a straw or by squeezing a rubber pad. Various eye pointing devices are also available, and voice control is a means of interfacing that is becoming more sophisticated and reliable.

When none of these overt means of control are applicable, it is possible to reach beneath the skin's surface and draw upon the body's internal signal system. An interface exists that reads electromyographical (EMG) signals, i.e., signals that control the muscles, and research is being conducted that uses the electrical activity of the brain to determine what a person is looking at.

It is probably true to say that the field of interface development is an engineer's dream, and to some extent a service provider's nightmare (as well as a blessing, of course).

The overwhelming number of (new) interfaces available places upon a disabled person's therapist, teacher or care-giver, the difficult and critical task of selecting and installing the interface.

There are a number of sources and resources that can help in this interfacing process, but before mentioning these, I would like to urge readers or listeners who are using or providing interfaces to begin the important and much needed process of evaluating this plethora of devices. The user can do so by speaking out. Don't for example, be satisfied with a switch that gives you a headache, that is chafing, fatiguing or that fails. As a service provider, you can keep track of the history of use of a switch, the number of times a switch has been tried and found unsuitable and why. Then share this information in letters or papers or, if you feel inclined, carry it through to formal evaluation and publication. Such information sharing is badly needed. It can help avoid duplication of effort and can result in a number of benefits for everyone concerned.

A comprehensive *Guide to Controls* is published by the Rehabilitation Engineering Center of the Children's Hospital at Stanford, Palo Alto, California. The guide gives descriptions of many interfaces, as well as information on the interfacing of client to computer.

The Interfacing Process

Interfacing (the selection and installation of an interface) can determine the success or failure of the use of a computer by a client, and considerable research efforts have been invested in this area. A single-switch interface assessment package for Apple II computers developed at OCCC is currently undergoing field testing (Shein et al, 1983) and will

**This section of
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is sponsored by
Manufacturers Life Insurance
Company, Toronto, Ontario.**

be available this fall. The package contains an assessment protocol in which four factors (MSIP) — (M) residual controlled Movement; (S) the choice of (body) Site; (I) the choice of Interface; and finally, (P) the method of Placement — constitute the elements of the control system. At the Massachusetts Institute of Technology (Rosen et al, 1983), attempts to continue in an effort to match client profiles are based on factors of Reach, Force, Speed and Accuracy with similarly based interface profiles.

Many questions still need to be asked and answered. A sampling might include the following:

- Should one, two, three or more switches be used?
- What are reliable rules of thumb or decision criteria concerning when to use a special interface system? or just a keyboard?
- When should an interface system be changed?
- How does one anticipate and promote physical and mental development through the choice of an interface system?
- How does one optimally take account of a person's preferences (and a youngster's change in preference when the charm of a special input and/or output system turns into a stigma)?

Much of the development of interfaces and interfacing protocols has been done by engineers assisted by therapists, augmentative communication specialists and occasionally educators and psychologists. The client or recipient of the interface is rarely in a position to provide input at the initial design stage and is therefore, again, compelled to take a passive or consumer role. With increasing numbers of disabled persons using aids, computers, special devices and their necessary interfaces, a more active role for design modification and evaluation may be assumed by the end-user of the interface. But until that time, the service providers will be called upon to be both students and critics of the art of interfacing disabled persons to enabling devices.

In concluding this brief and admittedly parochial review of interfaces and interfacing approaches, the Rehabilitation Engineering Society of North America (RESNA)

should be mentioned. RESNA is an organization that through its annual conference proceedings, integrates and disseminates a wealth of information on these and related areas. □

Major Distributors of Interfaces in Canada and the U.S.

- NRC (National Research Council of Canada), Ottawa, Canada K1A 0R8
- PRC (Prentke Romich Company), 8769 Township Rd., 513 Shreve, Ohio 44676
Telephone: (216) 567-2906
- TASH (Technical Aids and Systems for the Handicapped, Inc.), 2075 Bayview Ave., Toronto, Ontario M4N 3M5
Telephone: (416) 486-3569
- Zygo Industries, Inc., P.O. Box 1008, Portland, Oregon 97207
Telephone: (503) 297-1724

Resources

- *Guide to Controls*, available from Rehabilitation Engineering Center, Children's Hospital at Stanford, 520 Willow Road, Palo Alto, California 94304
- *Proceedings of the Sixth Annual Conference on Rehabilitation Engineering*, available from RESNA, 4405 East-West Highway, Bethesda, Maryland 20814

References

- Papert, Seymour A., and Weir, Sylvia. "Information Prosthetics for the Handicapped," MIT, Artificial Intelligence Laboratory Memo No. 496, LOGO Memo N.51, September, 1978.
- Rosen, Michael J., and Goodenough-Trepagnier, Cheryl. "Development of a Computer-Aided System for Prescription of Non-Vocal Communication Devices: A Progress Report." RESNA Proceedings (1983): pp. 191-193.
- Shein, Fraser; Lee, Kathy; and Milner, Morris. "Systematic Assessment of Key Factors to Prescribe Single-Input Interface Controls." RESNA Proceedings (1983): pp. 221-223.

A GREAT LOSS

Communicating Together mourns the tragic death of Dr. G. Allan Roeher killed in the Air Canada jet fire of June 2, 1983. Dr. Roeher was totally committed to improving the lives of the mentally handicapped in all countries of the world. As one of his support activities, he generously gave of his time to facilitate sessions on Augmentative Communication at the August, 1982 International Conference of IASSMD (International Association for the Scientific Study of Mental Deficiency). His loss will be felt by many.

Announcement

Award for IPCAS Fellow, 1984

The International Project on Communication Aids for the Speech Impaired invites proposals for a study on a topic of importance to the field of Augmentative and Alternative Communications.

For details on submission requirements, write: Dr. John Eulenberg, Chairman, IPCAS Fellow Committee, c/o Artificial Language Laboratory, Computer Science Department, Michigan State University, East Lansing, Michigan 48824

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Readers Write



Dear Mrs. McNaughton,

I was most interested to see your first issue of the Blissymbolics Communication Institute's magazine *Communicating Together*. I think this is a long overdue development and will be much welcomed by professionals working in the field.

I am currently undertaking an extensive world overview of cerebral palsy and other severe disabilities, which involves visits to over 40 countries. The existence or otherwise of a knowledge of Blissymbolics is a question I invariably ask. It is surprising just how far Blissymbolics has travelled in recent years, though there is still a great lack of knowledge on the subject.

I am involved in the establishment of a new international organization, to be known as Cerebral Palsy Overseas, which will come into existence formally on 1 September, 1983. At that stage I shall seek a formal exchange of journals.

I look forward to hearing from you.

Yours Sincerely,
Derek Lancaster-Gaye
Deputy Director
The Spastics Society
London
England

Readers are invited to contribute letters with comments and requests to this regular column.

Blissymbol Learning Programs on the Apple II computer for non-speaking students

Three programs developed by Florence and John Wertz
and the
Minnesota Educational Computing Consortium

Blissboard — provides both a user's Blissboard and its diskette counterpart. Contains nearly 500 symbols.

Diskette + Manual \$35 Canada
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3 Diskettes + Manual \$95 Canada
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Institute
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Toronto, Ontario
M4G 1R8

Bliss Drills — designed to aid the learning of individual Blissymbols and to distinguish them from one another. Contains fourteen different drills.

1 Diskette + Manual \$35 Canada
\$36 U.S.

Available in U.S. from:
Minnesota Educational Computing
Consortium
2520 Broadway Drive
St. Paul, Minnesota 55113
U.S.A.

For Your Information

Blissymbol components used in section headings and design...

Now, with accompanying words:

person 	we, us 	public 	woman 	family 	God 	about, of 	minus, without
(to) communicate 	(to) share 	(to) teach 	(to) learn 	(to) read 	(to) write 	(to) hope 	(to) win
cause 	science 	knowledge 	opinion 	event 	idea 	(to) help, aid 	Blissymbol
machine 	computer 	thing 	schedule 	paper, page 	book 	plural indicator x 	combine indicator
question 	international 	news 	a, on 	fruit 	day 	from 	to, towards

Answers to Symbol Quiz (from p. 19)

1.



2.

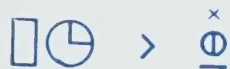


3. The action indicator is usually placed over the first component.

Note:

For a better understanding of all the component parts within Blissymbols, the reference *Blissymbols for Use*, B. Hehner (Toronto: Blissymbolics Communication Institute, 1980) is highly recommended.

Schedule of Events



BCI Elementary Workshops

BCI Elementary Workshop training sessions are held throughout the year and provide professionals and families with an opportunity to learn about Blissymbolics. The workshops include thirty hours of lectures, and group and individual assignments.

Forthcoming Workshops:

In Ontario

—October 17-19 in Toronto
Contact: Blissymbolics Communication Institute, 350 Rumsey Road, Toronto, Ontario, Canada M4G 1R8
Telephone: (416) 425-7835

In Alberta

—September 29 - October 1 in Calgary
Contact: Debbie Tucker, Mount Royal College, Faculty of Continuing Education and Extension, 4825 Richard Road, S.W., Calgary, Alberta T3E 6K6
Telephone: (403) 240-6868

In Newfoundland

—October 1983 in St. John's
Contact: Mrs. Jane Green, 75 Circular Road, St. John's, Nfld. A1C 2Z4

In Manitoba

—October 19-21 in Winnipeg
Contact: Mrs. Brenda Yost, Special Education Co-ordinator, St. Vital School District #6, 900 St. Mary's Road, Winnipeg, Manitoba R2M 3R3

In Massachusetts

—September 30 - October 2 in Boston
Contact: Denise Riley Okeen, 14 Cedar Drive, Canton, MA. 02021 U.S.A.

In Florida

—October 13-15 in Orlando
Contact: Mrs. Sandra R. Osborn, Blissymbolics Communication Resource and Demonstration Center, 1600 Silver Star Road, Orlando Fl. 32804 U.S.A.
Telephone: (305) 293-5841

In Wisconsin

—November 10-12 in Madison
Contact: Aleta Barmore, Communication Programs, University of Wisconsin — Extension, Room 225 Lowell Hall, 610 Langdon Street, Madison, Wisconsin 53706 U.S.A.
Telephone: (608) 262-4379

In West Germany

—September in Dusseldorf
Contact: Mr. Hermann Frey, Rott- hauser WEG 34, 4000 Dusseldorf 12, West Germany

In India

—September 1983 in Calcutta and Mysore
Contact: Mrs. Anne Warrick, 1949 Fairbanks Avenue, Ottawa, Ontario K1H 5Y2

Correspondence Course In Ottawa

—October 1 to November 17, 1983
On-site session November 18-19
Contact: Mrs. Anne Warrick, 1949 Fairbanks Avenue, Ottawa, Ontario K1H 5Y2
Telephone: (613) 731-4439

Internship 1983

In Toronto

—Oct. 11 to Nov. 11
The Blissymbolics Communication Institute's **Internship Program**, held in Toronto each autumn, provides special training for professionals who are responsible for developing and supporting Blissymbol programs in their country or region. Activities included in the five-week program are an Elementary Training Workshop, observation and participation in clinical and classroom settings and individualized study in areas of special interest.
For further information write Blissymbolics Communication Institute.

Amer-Ind Code Workshop

A workshop on the Amer-Ind Gestural Code, conducted by Dr. Madge Skelly-Hakanson in conjunction with the Fourth Annual Southeast Non-Speech Communication Conference, October 8, 9 and 10, 1983, in Birmingham, Alabama. Jointly sponsored by the Center for Developmental and Learning Disorders and the Alabama Department of Mental Health. For information contact Pam Elder, CDLD, 313 University Station, Birmingham AL 35294, U.S.A.
Telephone: (203) 934-5448

June 19, 1984 Full Day Session on Communication Aids within The Second International Conference on Rehabilitation Engineering June 17 - 22, 1984

being organized by
the Canadian National
Committee
of IPCAS

Presentors include:

Arlene Kraat, U.S.A.
Bob Fawcus, U.K.
Gunnar Fagerberg, Sweden
Penny Parnes, Canada
Jean Destrooper, Switzerland

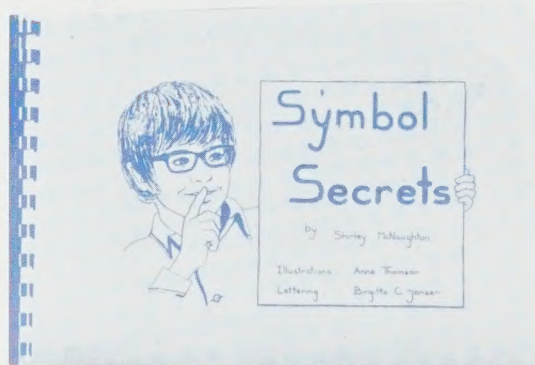
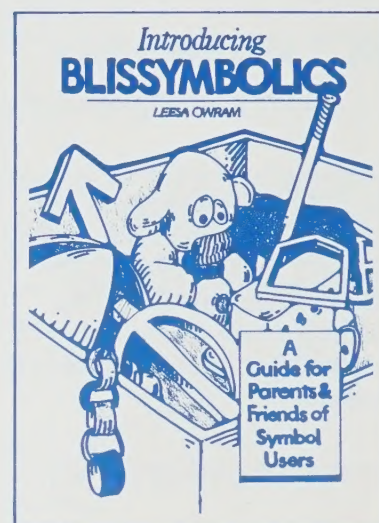
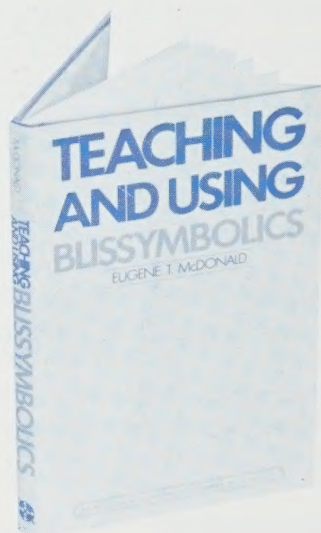
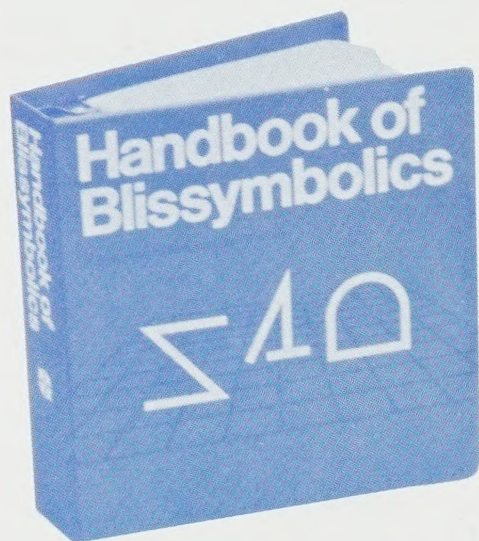
An important opportunity to participate in an international sharing of perspectives.

For Conference Information contact: Conference Services, National Research Council of Canada, Ottawa, Ontario, Canada K1A 0R6.

BCI PUBLICATIONS

The Blissymbolics Communication Institute
produces and distributes

a variety of textbooks and materials on teaching and using Blissymbols



For information write:

In Canada

Blissymbolics Communication
Institute
350 Rumsey Road
Toronto, Ontario M4G 1R8

In the Province of Quebec for
publication in the French
language:

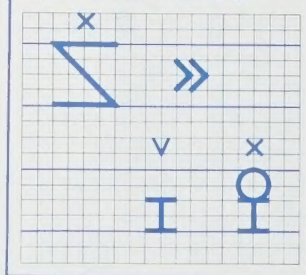
Association de Paralysie
Cérébrale du Québec Inc.
525 Boul. Hamel est.
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Quebec G1M 2S8

In the United States

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Box 1943
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Blissymbols For Preschool Children

ANNE WARRICK



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Wisbech
Cambs PE132AE
England

